PRE-TEST IN MATHEMATICS 6

Name_____ **Score**_____
Teacher_____ **Date**_____

Direction: Read and solve the given problems carefully. Write the letter of your answer on the space provided before each number.

_____1. What is 1/5 + 3/5?
A. 2/5 B. 4/25 C. 4/10 D. 4/5

_____2. Add 2/4 and ¾.
A. 5/4 B. 1 ¼ C. 4/5 D. 1 2/4

_____3. Add ½ and 2/5.
A.3/5 B. 3/10 C. 3/7 D. 9/10

_____4. Subtract ¾ from 5/6.
A.1/12 B. 3/6 C. 1/2 D. 8/10

_____5. Subtract 7/8 and 3/8.
A. 4/8 B. ¼ C. ½ D. 10/8

_____ 6.When 8 is multiplied by 2/3, the product is _____.
A. 8 2/3 B. 5 1/3 C. 3 3/8 D. 2 1/3

_____7. What is 4/5 is multiplied by 9/10 ?
A. 30/50 B. 18/25 C. 37/50 D. 21/25

_____8. When 8 is divided by 1/3, the quotient is _____.
A. 24 B. 25 C. 26 D. 27

_____9. In 2/3 ÷ 6/7, the quotient will be _____
A. 7/8 B. 7/9 C. 7/10 D. 7/11

_____10. The sum of 6 + 0.413 + 0.173 is _____
A. 0.6586 B. 6.586 C. 6.865 D. 6.658

_____11. Subtract 0.9289 and 0.7493. The difference is
A. 0.2216 B. 0.1796 C. 1.6782 D. 0.0796

_____12. For her father's birthday, Cielo bought a gift worth P206.50. How much of her five hundred peso bill was left?
A. P293.50 B. P286.50 C. P274.50 D. P253.50

_____13. It means the comparison between two numbers
a. Ratio b. proportion c. decimal

_____14.It is the result of finding a certain percent of a number.
a. Rate b. base c. percentage

_____15.It is an equation stating that two ratios are equal.
a. Ratio b. proportion c. base

_____16.It is the element usually followed by the word percent of the sign %.
a. Rate b. base c. percentage

_____17. It is the other word/term for multiplicative inverse.
a. Proportion b. reciprocal d. fractio

_____18. There are 24 boys and 16 girls in Grade V-Camia. What is the ratio of girls to boys using fraction?
A. 24/16 B. 16/24 C. 16/40 D. 24/40

_____**19**. A recipe for pancakes uses 3 cups of flour and 2 cups of milk. What is the ratio of milk to flour?
A. 2:3 B. 3:2 C. 2:5 D. 5:2

_____20. Lei had ₱150. She spent ₱48 for spaghetti and Php12 for the drinks. What percent of her money was left?
A. 30% B. 50% C. 60% D. 40%

_____21. Kate has a 15% mistake in a 60-item test. How many mistakes does Kate have in the test?

A. 9 B. 12 C. 15 D. 20

_____22. Which of the following best describes the set of integers from –12 to –4?

A. {–12, –11, –10, –9, –8, –7, –6, –4, } C. {–12, –8, –6, –4, -2 , 0}

B. {–12, –10, –8, –6, –4} D. {–4, –5,-6,–7,–8,–9,–10,-11,-12}

_____23. The correct increasing order of integers of 18, -20, -30, 17, 20 is _____

A. -30, -20, 17, 20, 18 C. 20, 18, 17, -20, -30

B. -30, 20, 18, 17, 20 D. -30, -20, 17, 18, 20

_____24. Find the value of N to make 6^3 = N true.

A. 18 B. 216 C. 36 D. 261

_____25.Which solid figure has polygonal base and its faces are triangles?

A. Triangular prism B. Cube C. Cone D. Sphere

_____26.A _____ is a solid figure with a circular base and one vertex.

A. Cylinder B. Cone C. Square pyramid D. Sphere

____**27**.Which solid figure has triangular base, 6 edges, 3 triangular faces and 1 common vertex?

A. cone C. triangular prism

B. square pyramid D. triangular pyramid

_____28.Which words will complete the statement correctly?

_____ figure is two-dimensional with length and width while

_____ figure is three-dimensional with length, width and depth.

A. geometric, spatial C. solid, plane

B. plane, solid D. solid, spatial

_____29.Which of the following real object represent a triangular prism ?

A.  B.  C.  D. 

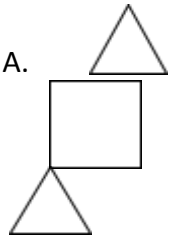
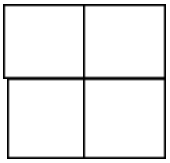
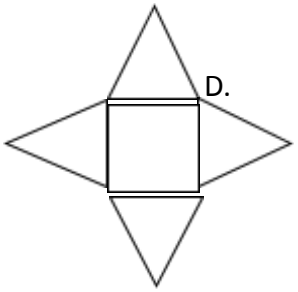
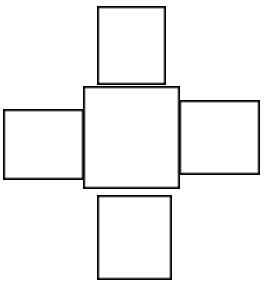
_____30. How many faces does a sphere have?

A. 0 B. 3 C.1 D. 2

_____31. A cube has _____ faces.

A. 8 B. 6 C. 10 D. 4

_____32.Which of the following will form a square pyramid?

A.  B.  C.  D. 

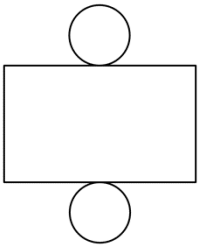
_____33. Which solid figure will be formed using the net?

A. cone

B. cylinder

C. pyramid

D. sphere



_____ 34.What is the missing term in the sequence 1, 3, 7, 15, _____?

A. 30 B. 31 C. 32

D. 33

._____35.What is the formula in finding the 5^{th} term in the sequence 1, 3, 7, 15?

A. n + 1 B. n + 2 C. 2n + 1 D. $n^2 + 1$

_____ 36. What is the 10^{th}term in the sequence 2, 5, 8, 11 . . .?

A. 29 B. 39 C. 49 D. 59

Direction: Match Column A with column B for the correct formula.

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Column A	Column B
____37. Volume of Rectangular prism	A. V= ∏r²h/3
____38. Volume of rectangular pyramid	B. V = S³
____39. Volume of cube.	C. V = 4∏r³/3
____40. Volume of cylinder	D. V= lwh
____41. Volume of cone	E. V = ∏r²h
____42. Volume of sphere	F. V = lwh/3

____43. Calculate the Volume of cylinder if r = 3 cm and h = 5 cm

A. V = 141.3 cm³ B. V = 141.30 cm² C. V = 141.2 cm³ D. V = 141.2 cm²

_____44. What is the volume of a cylinder if the radius is 2 m and height is 6 m?

A. V = 75.36. m² B. V = 75.36 m³ C. V = 75.44 m² D V = 75.44 m³

_____45. A cylinder is 154 inches high and 3 inches in radius, find its volume.

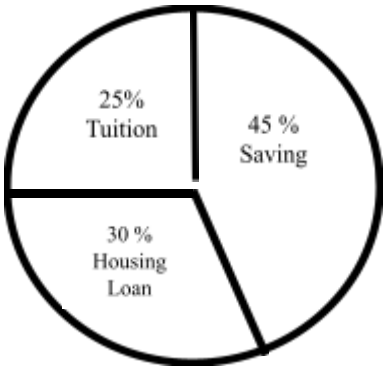
A. 4352.04 inch^3 B. 4352.04 inch^2 C. 4352.40 inch^3 D. 4352.40inch^2.

_____46. Find the volume of a pyramid with a rectangular base measuring 6 cm by 4 cm and height 10 cm.

A. 80cm B. 80 cm³ C. 80cm² D. 80m³

Answer the questions below using the graph

Family Bautista's Expenses



P20,000.00 monthly budget

_____ 47. What percent of the salary goes to family savings?_____

A. 25% B. 45% C. 30 % D. 0%

_____48. How much of the budget goes to tuition fee?_____

A. Php 9,000.00 B. Php 6,000.00 C.Php 5,000.00 D.Php5.00

_____49. How much is allotted to housing loan?_____

A. Php 6,000.00 B.Php 5,000.00 C.Php5.00 D.Php 9,000.00

_____ 50. Which has the greatest budget? _____

A. Tuition B. Housing loan C. Saving D. None

DIAGNOSTIC TEST IN MATHEMATICS VI

TABLE OF SPECIFICATION

OBJECTIVES	NO. OF ITEMS	PLACEMENT	PERCENTAGE
1. Adds and subtracts simple fractions and mixed numbers without or with regrouping. M6NS-Ia-86	5	1-5	10%
2. Multiplies simple fractions and mixed fractions. M6NS-Ib-90.2	2	6-7	4%
3. Divides simple fractions and mixed fractions. M6NS-Ic-96.2	2	8-9	4%
4. Adds and subtracts decimals and mixed decimals through ten thousandths without or with regrouping. M6NS-Id-106.2	2	10-11	4%
5. Solves 1 or more steps routine and non-routine problems involving addition and/or subtraction of decimals and mixed decimals using appropriate problem solving strategies and tools. M6NS-Id-108.2	1	12	2%
Defines and illustrates the meaning of ratio and proportion using concrete or pictorial models M6NS-IIb-131	5	13-17	10%
Expresses one value as a fraction of another given their ratio and vice versa. M6NS-IIa-129	2	18-19	4%
Solves routine and non-routine problems involving finding the percentage , rate and base using appropriate strategies and tools. M6NS-IId-143	2	20-21	4%
Compares and arranges integers M6NS-IIh-154	2	22-23	4%
Gives the value of numbers expressed in exponential notation M6NS-IIf-147	1	24	2%
Visualizes and describes the different solid figures: cube, prism, pyramid, cylinder, cone, and sphere	3	25-27	6%
Differentiates solid figures from plane figures.	1	28	2%
Illustrates the different solid figures using various concrete and pictorial models.	1	29	2%
Identifies the faces of a solid figure.	2	30-31	4%
Identifies the nets of the following space figures: cube, prism, pyramid, cylinder, cone, and sphere using plane figures.	2	32-33	4%

Formulates the rule in finding the nth term using different strategies (looking for a pattern, guessing and checking, working backwards)	3	34-36	6%
Derives the formula for finding the volume of cylinders, pyramids, cones and spheres.	6	37-42	12%
Finds the volume of cylinders, pyramids, cones and spheres.	4	43-46	8%
Interpret data presented in a pie graph.	4	47-50	8%
TOTAL	**50 ITEMS**	**1-50**	**100%**

KEY TO CORRECT

1. D
2. A
3. D
4. A
5. C
6. B
7. B
8. A
9. B
10. B
11. B
12. A
13. A
14. C
15. B
16. A
17. B
18. B
19. A
20. C
21. A
22. A/B
23. D
24. B
25. A
26. B
27. D
28. B
29. B
30. A
31. B
32. C
33. D
34. B
35. C
36. A
37. D
38. F
39. B
40.E
41. A

42. C
43. A
44. B
45. A
46. B
47. B
48. C
49. A
50. C